CRAYON AUDIO GMBH

www.crayon-audio.com

CFA-1.2

Operating Instructions

V5.04-90

English

CAUTION:

Caution! The output stages are implemented as bridge circuits. Therefore, all loudspeaker sockets carry a DC voltage of approx. 18V. The loudspeakers should NOT be connected to ground. This would destroy your loudspeakers. Hence, the loudspeakers should be connected only to banana sockets pairs. The same colour markings (red = + and black = -) are generally indicated on loudspeaker boxes.

The CFA1 must be first switched to the Standby mode and then disconnected from the Mains voltage, before connecting to or disconnecting from the connectors at the back. Otherwise, voltage surges may result which could damage the CFA1 or other components of the audio system or AV-systems connected.

This device must be earthed. It is essential that the earthed power cable with integrally cast plug provided be used. Never use an unearthed plug or adaptor.

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The contents of this manual have merely character of information. They can be changed without previous announcement and may not be laid out as an obligation on the part of Crayon Audio GmbH. Crayon Audio GmbH takes over no responsibility and assumes no liability for errors or inaccuracies, which are possibly included in these operating instructions.

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Declaration of Conformity - CE Communauté Européenne

Declaration of Conformity CE-Communauté Européenne
Crayon Audio GmbH affirms that this product fulfils the requirements of the low-voltage guidelines 73 / 23 / European Economic Community and the guidelines on electromagnetic compatibility 89 / 336 / European Economic Community which was changed by the guidelines 92 / 31 / European Economic Community and 93 / 68 / European Economic Community. The conformity of the said product with the regulations of the guidelines 73 / 23 / EEC (low-voltage guideline) is proved by total compliance to the following standards:

Standard / Date of Publication / Test
EN 60065 1998 General requirements Marking
Injurious radiation
Warming under normal conditions
Danger to touch under normal operation conditions
Isolation requirements Maloperation Mechanical rigidity
Parts with mains connection
Components
Terminal equipment
Electrical connections and mechanical mounting
Protection against electrical shock
Stability and mechanical risks
Fire resistance
The conformity of the said product with the regulations of the guideline 89 / 336 / European Economic Community
(electromagnetic compatibility) is proved by total compliance to the following standards:

Standard / Date of Publication / Test
EN 60065 Audio, video and similar electronic apparatus – Safety requirements
EN 55013 Sound and television broadcast receivers and associated equipment Radio disturbance characteristics Limits and methods of measurement
EN 55020 Sound and television broadcast receivers and associated equipment - Immunity characteristics - Limits and methods of measurement

FCC-Notice:
Notice:
This device was tested according to part 15 of the FCC regulations and found to comply with the limits for Class B digital devices. These limit values should guarantee an adequate protection against harmful disturbances if the device is operated in residential areas. This device generates radio frequency energy and may cause interference to radio and television reception. The device can disturb the radio traffic if it is not installed in accordance to instructions and is used. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna
- Increase distance between the device and the receiver
- Connect the device to a different mains outlet so that receiver is on different branch circuit
- If necessary, the user should consult a specialized dealer or an experienced radio/television technician for additional suggestions.

Introdduction

Dear Music Lover,

The CFA-1.2 is an integrated amplifier developed after many many years of study and research. Our précis was simple; Create an integrated amplifier that within it's power rating, establishes itself by having a unique relationship to music and sound reproduction among today's components...And while maintaining said sonic excellence that we might through diligent effort, engineering expertise, and perhaps a small measure of technical finesse, make operation simple and lifelong enjoyment plausible.

As such, we have implemented a case that is precision machined from solid aircraft grade aluminium. Careful laser cutting and assembly lead to a beautifully finished component that's beauty is more than skin deep. Each design cue of the CFA-1.2 has not only form but function, and contributes to the purity of sound, and life-like quality one can obtain from Crayon. The case, rugged yet elegant, serves to stabilize the internal electronics while acting as a very effective heat sink to keep unwanted temperatures away from any signal carrying circuit.

All internal tracing and signal runs are kept as minute as possible as to not corrupt the music in any fashion. Using the newest technologies, in this case, a PCB design called Broadband Dirks' Decoupling (named for Professor Dirks) decouples the power supply up to t GHz to provide extreme electrical stability, and the lowest possibility of any electromagnetic interference.

Further care is taken by using cross regulators to stabilize the power supply of the preamplifier in the often disturbed region of 1Hz to 10MHz, thereby applying balanced current regardless of operating conditions.

The Crayon CFA-1.2's output stage contains current feedback, (not signal feedback), which is a new method used in output stages that we feel makes the CFA-1.2 all the more celebratory.

Despite common parlance, A Swiss made Switching Power Supply, and German designed controls round out what is currently our finest effort in the vast world of integrated amplifiers. We have developed this product without compromise, and feel certain that our efforts will lead you to experience your music with a viscerally present and lifelike portrayal that will be new in your experience. Your CFA-1.2 should be with you for years. Please, should you have a minute, let us know how you like it.

Sincerely,

Roland Krammer
Principle/Chief Engineer

Unpacking

The following Accessories belong to the scope of supply of the CFA1;

- IEC Power Cable
- Remote Control (including 2 pcs. Type AAA Batteries)
- Instruction Manual

It is advisable to keep the original packaging in case that you have to transport the device at a later time

Voltage Selection

The power amplifier CFA1 is equipped with a switching power supply. This power supply works at mains voltage from 115 to 230 V (50/60Hz). The mains voltage cannot be set manually on the device. The mains input voltage range covers until to 230 V mains voltage.

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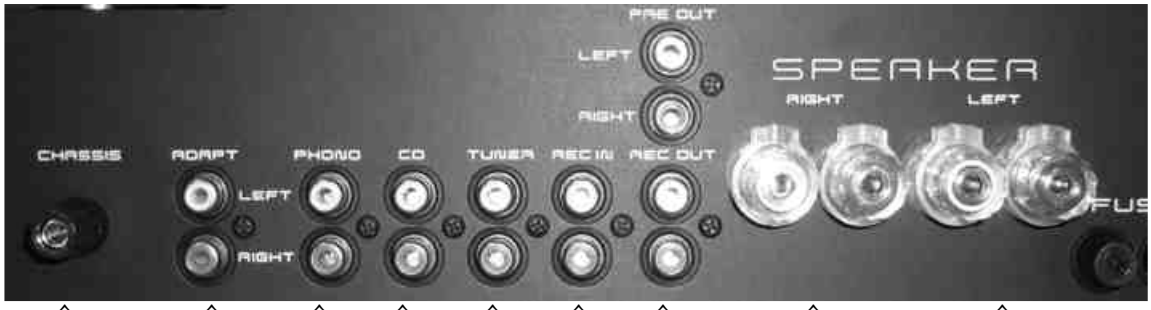
This device must be earthed. It is essential that the earthed power cable with integrally cast plug provided be used. Never use an unearthed plug or adaptor.

Cleaning

Before every cleaning, make sure that the CFA1 is disconnected from the mains supply. Remove dust and fingerprints with a soft, dry cloth. Do not use household detergents to clean of the device.

AUDIO INPUTS, OUTPUTS AND SPEAKER TERMINALS



⇑ GND ⇑ Adapter ⇑ Phono ⇑ CD ⇑ Tuner ⇑ RecIn ⇑ Rec/PreOut ⇑ Right ⇑ Left

Chassis		Banana socket Phono-Ground
Adapter		RCA socket Phono - Pickup matching (Description on page 18)
Phono	unsymmetrical	Input Phono (Moving Magnet / Moving Coil)
CD	unsymmetrical	Input Compact Disc Player
Tuner	unsymmetrical	Input Tuner
RecIn	unsymmetrical	Input Recorder (Tape Deck, DAT or Minidisk)
RecOut	unsymmetrical	Output Recorder (Tape Deck, DAT or Minidisk)
PreAmpOut	unsymmetrical	Preamplifier Output, regulated Output
Right	symmetrical	Output Speaker Right Channel (black socket = negative output, red socket = positive output)
Left	symmetrical	Output Speaker Left Channel (black socket = negative output, red socket = positive output)

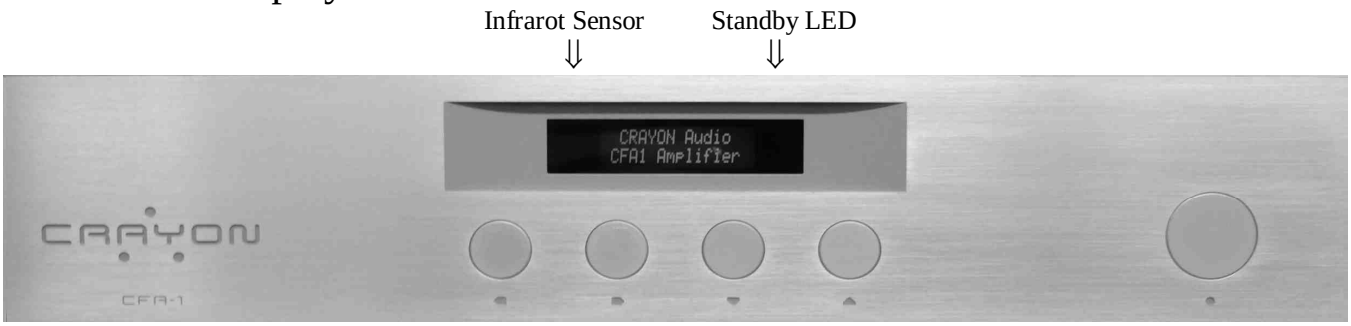
Connectors

Mains Connection and Fuse

Fuse	2 Fuse holders for 5x20mm Fine Fuses 10A / delay type
Mains Switch	The switch separates the Mains voltage from the internal circuit of the device
Mains Plug	Mains Plug 115 - 230 VAC

Basic Information

Front Panel Display



Standby

Press Standby and activate or deactivate the Standby mode.

Press Standby

Ready for use

Press Standby

Power off ..... Standby

Active Modue und Time out

The display and the controller is switched to idle-mode after 15 sec.

The green LED indicate at the new CFA-1.2 the active Mode.

Activation of any key on the device or IR Remote Control activates the display and the controller.

Remote Control

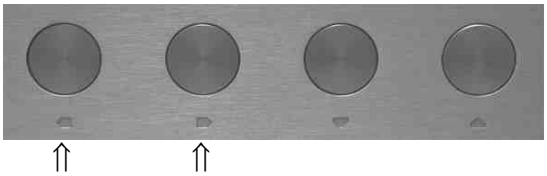
Insertion and change of batteries

At the back of your remote control there is the battery compartment fitted with a screw. Remove this screw with a suitable screwdriver (PH1). Thereafter you can pull out the battery compartment of the remote control.
Please Note:
Insert the batteries according to the marks on the inside of the battery compartment. Remove immediately possibly running out batteries. Dispose the old batteries according to the instructions of the respective manufacturer.

After insertion of the batteries push the battery compartment again into the remote control and screw this together.
The remote control is powered by two 1.5 volt alkaline batteries (IEC LR 03, AAA). We recommend you to use only new batteries. In any case you should never use old and new batteries together because the efficiency of your remote control can be strongly affected and in addition, shorten the life span of the batteries substantially. After you have inserted the batteries please press a key and examine whether the red light-emitting diode lights up; this is the confirmation that the batteries were properly inserted.

Personal Settings

Press both channel select keys at the same time and activate the set-up mode.

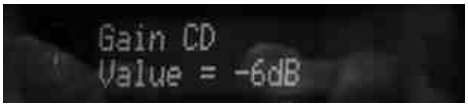


The single menu points can be selected with the channel selection keys.

Start of the set-up mode. The last selected channel remains stored for the setting of the tone and the balance control. Using this you can carry out these settings after hearing.

Gain Control (input sensitivity)

The Phono (second) channel is ready for gain control. Now this channel is selected. If you have a turntable connected and a signal available, you can carry out the gain setting also by hearing. By pressing the volume keys the gain can be changed in 2dB steps.



The CD (Compact Disk) channel is since the software version „CFA1_90-V1.00_REV1.10“ also adjustable from -6dB to +18dB.

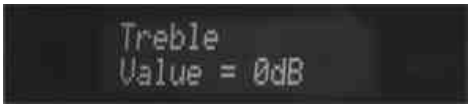
The tuner channel is ready for the gain control. If you have a tuner connected and a signal available, you can carry out the gain setting also by hearing. By pressing the volume keys the can be changed.

Personal Settings

The RecIn channel is ready for the gain control. If you have a device (e.g., cassette deck) connected and a signal available, you can carry out the gain setting also after hearing.

Tone Controller

The tone controller for low frequency (100 Hz) is ready for the gain setting. Now the channel, which was selected before you changed the mode in the set-up, becomes audible again. By pressing the volume keys the gain can be changed. (Max +14dB, min-14dB, in 2dB steps).



The tone controller for high frequencies (high-pass filter 12 kHz) is ready for the gain setting. By pressing the volume keys, the gain can be changed. (Max +14dB, min-14dB, in 2dB steps).
Note: Setting of 0dB for all 3 frequency bands, the tone controller remains inactive. The signal is connected without influence.

Balance

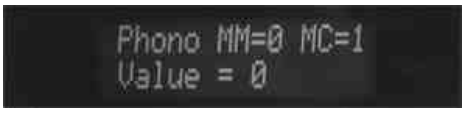
Here you can change the balance setting by reducing the gain of the right signal source. By pressing the volume keys the gain can be changed in steps of 1dB. The volume [+] key increases the attenuation which means that the negative number is incremented by 1 (-0db,-1dB,-2dB etc.).

(example)

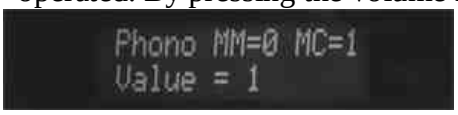
Here you can change the balance setting by reducing the gain of the left signal source. By pressing the volume keys the amplification can be changed in steps of 1dB.

Personal Settings

Phono Mode (Moving Magnet oder Moving Coil)



In this menu point you choose in which mode (MM or MC) the phono preamplifiers should be operated. By pressing the volume keys the setting can be changed.



Note: Matching of the pickup impedance see page 18 (Adapter)

Speaker Efficiency

At this point, you can customize the application points of the loudness depending of the efficiency of your speakers. The input value is "dB per watt per meter" in 1 dB steps. The range extends from 84dB/W/m to 105dB/W/m.
As an example, in 88dB/W/m and volume <= 45 the bass and the treble will be increased by 2dB. For volume> 45, there is no interference. When volume <36, the bass will be increased by 4dB.
A value of 102dB/W/m the bass and treble for the volume <= 31 will be increased by 2 dB. The second starting point in this case is <= 21. Also from Volume > 31, there is no influence of the audio signal! (Pure software feature)!

Contrast

The contrast of the LC-Display's can be changed in this menu point. Liquid Crystal Display changes its contrast over the years. Here you have the possibility to adjust this value if required.
Default is 24.

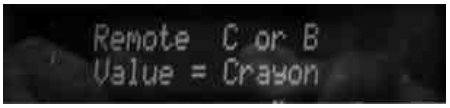
Individuelle Einstellungen

Volume Display

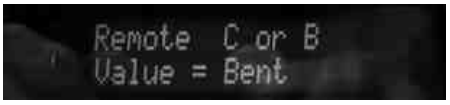
At this point you can set the kind of display volume. Number and bar graphs can be set.

BAR graph display in normal Mode.

Remote selection



At this point you can select the type of remote control. You can select the Crayon Audio remote or the Bent Audio Remote handset.



Loudness

The Loudness function can be selected (1) or deselected (0) by the Volume keys.

Note: The Loudness function is switched depending on the Volume and Speaker Efficiency setting by software.

After you have set-up all the parameters according to your choice, press both channel select keys at the same time once more. All settings are stored. The normal operation mode is automatically chosen. The Values are also stored and changed to the normla mode by Time Out after 60 seconds.

Factory Settings

By pressing the channel select [-] key and the volume [+] key simultaneously the memory is cleared and overwritten with default values.

Default Setting (Werkseinstellungen):

▪ Gain Phono PreAmp.	0dB	(Gain = Verstärkung oder Eingangsempfindlichkeit)
▪ Gain CD	0dB	
▪ Gain Tuner	0dB	
▪ Gain RecIN	0dB	
▪ BASS	0dB	
▪ TREBLE	0dB	
▪ Right Channel	-0dB	(right channel)
▪ Left Channel	-0dB	(left channel)
▪ Phono MM/MC	MM	(Pickup type)
▪ Spk efficiency	88dB/W/m	(Speaker efficiency)
▪ Contrast	24	(Contrast of display)
▪ Value or Bar	Value	(Volume display by number value)
▪ Remote	Bent	(Bent Audio Remote)
Loudness	1 (on)	**Merke: Note:** The Loudness function is switched depending on the Volume setting and Speaker efficiency by software. As examble Spk_efficiency = 88dB/W/m, for Volume > 46 no signal influencing exists. For Spk_efficiency = 102dB/W/m as examble, for Volume > 31 no signal influencing exists

Afterwards it is automatically changed to the normal operation mode after 1 minute or press both buttons of channel select again.

Operation

Channel Selection

The CFA1 has one Phono input (RIAA) and 3 high level inputs. Press a channel select [+/-] key of the remote control or in the front screen. The signals will be selected in the order; Phono, CD, Tuner or RecIn ([+]). In reverse direction if you press ([-]) key. For fast switching press the select key immediately again. After 1.8 second the Switching Process will be done.

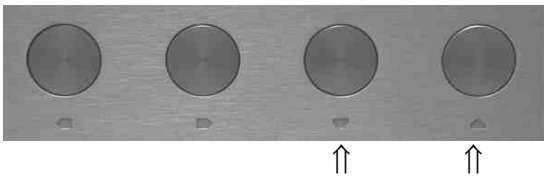
For recording with the CFA1, connect the input of the recording device (cassette deck, DAT or Minidisk) to the socket RecOut

With every change of channel the volume is reduced first to a minimum (Fade out, Mute) after which the channel change-over occurs. After switching the selected channel the volume is set back to the last value in steps (Fade in). This process needs approx. 1.8 second.

Operation

Mute

The volume is reduced gradually to -90 dB (Fade Out) by pressing the Mute key of the remote control or by pressing both Volume keys on the front panel. A renewed actuation of Mute key or both volume keys at the same time, will result in volume be set back to the original value (Fade In).



Volume = 0

If you set volume with the volume [-] key up to level to zero (Push volume [-] key so long, until level <1 is reached), the words " Volume: Mute" will be displayed instead of “Volume: 0”. This is due to the volume regulators being switched off (Mute) due to higher Crosstalk damping.

Adaptor

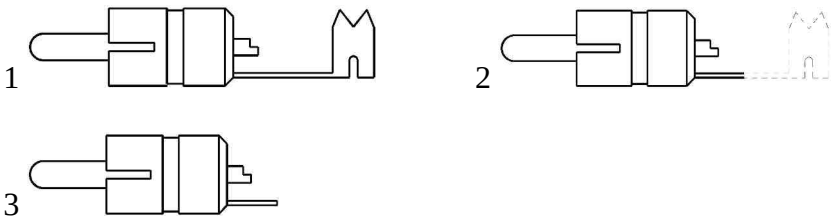
Impedance Matching for Pickup: (Moving Magnet)

The pickup, which you want to connect to the Phono input, must be matched for its impedance. The input resistance of the RIAA Phono preamp equalizer amounts to 53,33KOhm Most Moving magnet pickup systems and some Moving Coil pickup systems need a loading impedance of 47KOhm and a loading capacity between 150pF and 400pF. The required loading capacity depends on the pickups used. By connecting the adaptor plug, a resistor of 392KOhm and a capacity of 47pF will be connected parallel. This results in an input impedance of 47KOhm and an input capacitance of approx. 200pF together with the cable of the turntable drive, because the cables show a capacitance ranging from 70pF to 150pF per meter (mostly 150pF). A pair (for left and right channel) of the RCA (Cinch) standard adaptors is provided with the CFA1. If you need special RCA (Cinch) adaptors, these can be ordered from Crayon Audio GmbH or from one of our authorized dealers in your area. With the order of the adaptor, please provide us the brand and type of the pickup, or the information of required loading impedance and loading capacity. You can get these data from the specifications of your pickup.

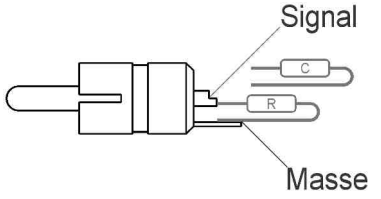
Technically experienced can make these adaptors themselves. Obtain two RCA plugs

⇑

Unscrew the external cover. Shorten the cord grip and ground fin (see drawing) with a suitable side- cutter.



Solder the resistor (392KOhm) and the capacitor (47pF) at the points "Signal" and "Masse"



You can get these components from an electronics store in your area. Any 125mW, 0.1% carbon or metal film resistor of small form factor is suitable. For the capacitor any Styroflex or similar types of small size can be used. Consult your electronics shop.

Adaptor

Impedance Matching for Pickup: (Moving Magnet)

Moving Coil pickups generally have lower impedance values. Depending on the manufacturer and Type, the impedance of these pickups range between 20 Ohm and 47000 Ohm. Even MC systems may need loading capacities and mostly lie between 100pF and 400pF.
You can order adaptor for Moving Coil pickups from Crayon Audio GmbH or from one of our authorized dealers near to you. When ordering, please provide us with the brand and type the pickup, or the information about required loading impedance and capacity. You take these data please from the specification sheet of your pickup.

Technically experienced can make these adaptors also by themselves. Obtain two Cinch plugs (see page 18).
Here is a sample calculation. This shows how to calculate the values of the resistors which you need for the corresponding effective impedance (MM and MC).

Input Impedance of RIAA Pre-amplifier: R(i) = 53,33KΩ Resistance

(Example MM): R(load) = 47KΩ Required Resistance for Adaptor:

R(ad) = ?

R(ad) = 1 / (1 / R(i) – 1 / R(load))

R(ad) = 1 / (1 / 47000 – 1/ 53330) = 1/ (0.00002127659 – 0.00001871172) R(ad) = 1 / 0,0000025254237 = 395373Ω

The next value from the E96 Series = 392KOhm. Consult in your electronics store. They are conversant with E96 Series (precision resistor).

For the Load Capacity: $C_{(ad)} = C_{(load)} - C_{(Cabel)} = 200pF - 150pF = 50pF$

Available Value: $C_{(ad)} = 47pF$

With a required loading capacity of 200pF (see manufacturer data) you must subtract the capacity of the Phono cable from the specified loading capacity. You take this value from the data-sheet of your turntable. The capacity of the signal cable of the turntable may be sufficient in some cases as a loading capacity and you may not need a capacity to be soldered to the adaptor.

Technical Data

General	Dimensions 85 mm (H) x 438.8 mm (W) x 312 mm (D)
	Weight 11 kg
	Power Consumption 325 W max.
	Fuse 2 x 230 VAC 10A Slow-Blow
	Mains voltage area 115 VAC to 230 VAC

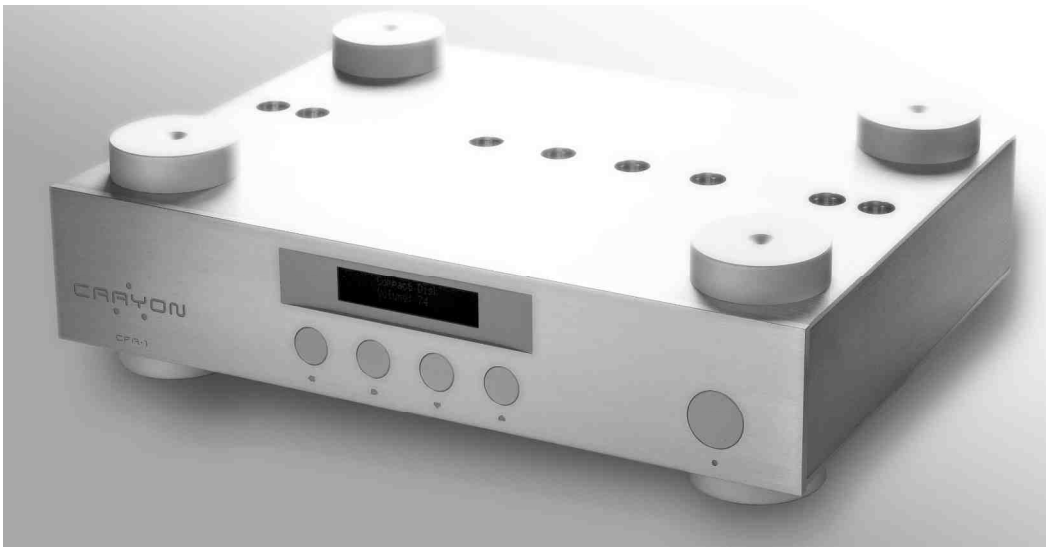
Audio Input

Line:	+10dBu
CD:	+16dBu
Input Impedance (Line):	>10k ohms
Sensitivity Phono:	5mV (MM)/ 0.8mV (MC) for nom. Output
Gain Phono @ 1kHz:	42dB (MM)/ 56dB (MC) RIAA
curve accuracy	+/-0.25dB 25Hz-20kHz

“For all inputs you can adjust the gain in 2dB steps up to 24dB”

Audio Output

Record Out:	2.743V, +10,8dB (max)
Power Output:	64 watts into 8 ohms, 90 watts into 4 ohms (Peak 117 watts into 4 ohms)
Frequency Response:	25Hz to 100KHz +/- 0.5dB
Bass:	+/- 13dB @ 100Hz Treble:
	+/- 13dB @ 7kHz Signal
to Noise Ratio:	>90dB Line In
Slew rate:	>25V/uS



Warranty and Customer Service

Warranty Conditions

Warranty applies to this product within the scope of the conditions in the country in which the product was purchased and your legally assured rights are not limited. In addition to the legally anchored rights, which apply to you, Crayon Audio GmbH undertakes to exchange all parts having defects resulting from faulty production. To support us, ask your Crayon retail specialist for Crayon's Warranty Program, which may apply in your country. An extended warranty may be available to customers of certain countries of Europe, America and in some other markets, who register their purchase with Crayon. A Warranty Card is delivered together with the
product and should be returned to Crayon as soon as possible with proof of purchase from retail specialist (authorized dealer).

Warning
The warranty does not apply if the product is serviced by a service provider not authorized by Crayon or is dismantled. There are no user-reparable components in the product and only an authorized service provider should be assigned to carry out any repairs.

Technical Support and Information

If you need technical support or information or for inquires with regard to the products, please contact your local specialist supplier or one of the Crayon Agencies listed below. Detailed information on local specialist suppliers / distributors are available at Crayon-Website: www.crayon-audio.com

IMPORTANT

- Keep a copy of the purchase receipt with which you can prove the date of purchase of the product.
- Make sure that device is insured when it is transported or is sent for repairs.

Product Registration

Register your product at our Website (www.crayon-audio,com) to receive our Newsletter with the latest from Crayon Audio GmbH and important information and assistance on warranty and service.

Warranty and Customer Service

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Important Safety Information

Explanation of the symbols that are used in these operating instructions and on the product:

This symbol is intended to alert the user that the case does not rest uninsulated dangerous voltages that can cause electric shock.

This symbol is intended to alert the user of important maintenance and servicing information in the instruction and service manuals.

ATTENTION
TO MINIMIZE THE RISK ELECTRIC SHOCK, DO NOT TAKE OFF THE COVER. THERE ARE NO USER SERVICEABLE COMPONENTS INSIDE.
ALWAYS ENTRUST SERVICING WORK TO CERTIFIED SPECIALIZED STAFF.
WHEN REPLACING FUSES USE THE RIGHT PROTECTION TYPE AT ALL TIMES TO AVOID FIRE HAZARD PERMANENTLY.
BEFORE REPLACING FUSES REMOVE THE POWER CABLE:

WARNING
DANGER OF ELECTRICAL SHOCK. DO NOT OPEN.
TO REDUCE FIRE HAZARD OR THE DANGER OF ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

MAINS PLUG
THIS DEVICE IT IS DELIVERED WITH A POWER PLUG EXCLUSIVELY FOR THE RESPECTIVE COUNTRY OF OPERATION, WHICH CANNOT BE RE-WIRED. USE ONLY THIS.

LOUDSPEAKER CONNECTION
AVOID SHORT CIRCUITS, WHEN CONNECTING THE LOUDSPEAKER. SHORT-CIRCUITING THE LOUDSPEAKER SOCKETS CAN DESTROY THIS DEVICE.

Important Safety Information

General Safety Instructions

1. Read the instructions. Read the safety instructions and the operating instructions before using this device.
2. Keep the operating instruction. Keep the security and operating instructions, for later reference.
3. Follow the warning notices. Take into consideration all warning notices on the device and in the operating instructions.
4. Follow the instructions. Adhere to all operating instructions and instructions.
5. Water and moisture. Do not operate the device not close to water, for example, near a bathtub, a washing bowl, a wash basin, a washing machine, in a humid cellar, near a swimming pool or near similar facilities.
6. Trolleys and racks. Use only carriage or racks, which are recommended by the manufacturer.
6a. A combination of device and trolley must be used with care. Quick braking, excessive effects of force and uneven surfaces possibly lead to toppling of the trolley with the device.
7. Wall-mount or Ceiling suspension. A wall-mount or ceiling suspension assembly should be carried out only according to the manufacturer's recommendation.
8. Ventilation. Place the device in such a way that the location or the position does not impair proper ventilation. For example, the device should not be placed on a Bed, Couch, Carpet or similar surface that may block the openings for ventilation. It should not also be placed in a enclosed area similar to a bookshelf or cupboard in such a manner that the airflow through the openings for ventilation are obstructed.
9. Heat. Do not place the device close to heat sources, e.g. radiators, heaters, stoves or other devices (including amplifiers), which generate heat.
10. Mains connection. Connect the device only to an electrical supply of the type, which is described in the operating instructions or indicated on the device.
11. Earthing and Non-exchangeability. Do not override safety precautions of the non-exchangeable or ground plugs . A non- exchangeable plug owns two blade-contacts and an additional ground contact on the device side, two round contacts and a ground contact on the mains connection side. The ground contact is for safety. If the provided plug does not fit in to your outlets, consult an electrician, who will replace the outdated outlets.
12. Protection of the power cable. The power cable should be routed so that it is not likely to be walked on or pinched by items placed upon or against them, paying particular attention to the cable at plugs, power outlet, and the point where they exit from the device.
13. Cleaning. The product should be cleaned only according to the manufacturer's recommendations.
14. High voltage supply lines. An outdoor antenna should not be installed close to strong power supply lines.
15. Ground of the outdoor antenna. If an outdoor antenna is connected to the Tuner/Receiver, make sure that the antenna system is grounded as to provide protection against voltage surges and built-up static charges. In United States, Section 810 of the National Electrical Code, ANSI/NFPA No. 70, which provides information with respect to proper installation, should be observed.
16. Lightning. For added protection for this equipment during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the power outlet and disconnect the antenna system.
17. Invasion of foreign bodies and liquid. Make sure that objects of any kind or liquids enter into this equipment. Never spill or splash liquid of any kind on the device.
18. Damage requiring service. In case of following, the device must be repaired by qualified personnel:
(1) The power cable is damaged.
(2) A foreign body or liquid has penetrated into the device. (3) The device has been exposed to rain or water.
(4) The device does not seem to function properly or shows a distinct change in performance. (5) The device has been dropped, or the case has been damaged.
19. Servicing. Do not attempt to service the device beyond the instructions provided in the operating manual. All other servicing must be referred to qualified personnel.

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Troubleshooting

The CFA1 cannot be switched on. The display is blank:

1.)Is the CFA1 connected to the mains through the supply socket at the back of the device?
2.)Have you switched on the mains switch beside the mains supply socket?
3.)Are the Fuses ok? (See page 8)

There is no sound both loudspeakers:

1.)Mute should not appear on the display. (See page 17)
2.)Is the Muting activated?
3.)Have you selected the right sound source and is the connected device switched on?
4.)Are all Cinch and loudspeaker cables properly connected to the CFA1?

There is no sound from one of the loudspeakers:

1.)Please activate the set-up mode by pressing both channel selection keys simultaneously and verify the balance settings. (See page 13)
2.)After you have set-up all the parameters according to your choice, press once more both canal choice keys at the same time. Now all settings are stored. The normal operation mode is automatically chosen.
4.)Are all Cinch and loudspeaker cables intact and properly connected to the CFA1?

The CFA1 sounds dull or shrill or has not enough bass:

1.)Please activate the set-up mode by pressing both channel selection keys simultaneously and verify the tone settings. (See page 13)
2.)After you have set-up all the parameters according to your choice, press once more both canal choice keys at the same time. Now all settings are stored. The normal operation mode is automatically chosen.
3.)Please pay attention to the correct polarisation of the loudspeakers, because with unequal polarisation the loudspeakers work against each other and thus "minimise" the bass.

The CFA1 hums or whirrs when connected to the turntable drive:

1.)Connect the Earth or Ground connection of the turntable with the Ground (GND) terminal on the backside of the amplifier.
2.) Check the connectors of the pickup, in particularly the Ground contact.

Troubleshooting

The CFA1 is too quiet, too loud or does not sound right when connected to the turntable drive:

1.)Please activate the set-up mode by pressing both channel selection keys simultaneously and verify the Phono settings. Choose according to requirements of MM or MC. (See page 13)
2.)After you have set-up all the parameters according to your choice, press once more both canal choice keys at the same time. Now all settings are stored. The normal operation mode is automatically chosen.
3.)Check the Phono input matching (adaptor). (See page 18)

The connected playback device is too quiet or too loud:

1.)Please activate the set-up mode by pressing both channel selection keys simultaneously and verify the Gain pre-settings of the input. Choose +dB or -dB as required so that it matches to the volume of the other channels. See page 14.
2.)After you have set-up all the parameters according to your choice, press once more both canal choice keys at the same time. Now all settings are stored. The normal operation mode is automatically chosen.

The Remote control does not function properly:

1.) Check the batteries.
2.) Direct sunlight, halogen lamps and fluorescent lamps can influence the reception of the infrared sensor considerably. If you have placed the CFA near such a source of disturbance, this can be the cause for the limited reception of the Remote control.
3.) The function of the Remote control must be in the amplifier mode (see instructions page 11).

!ATTETION!

The CFA1 must first be switched to the standby mode and then disconnected from the mains before making any connections on the back are connected or disconnected. Otherwise, you may generate surges which could damage the CFA1 or other components in your audio or AV system.

Accessories

Spikes

The construction of the CFA1 decreases effects of Microphony. However, this effect can be even further reduced by means of spikes. You can order these spikes made from high-grade steel from Crayon Audio GmbH or an authorized dealer near to you. You must screw this into the foot discs (Device underside).

Audio Cable

Pay attention to the use of high-quality RCA (cinch)- and loudspeaker cables, because bad analogue audio connections impair the quality of the music signal. You can order various high-quality audio and loudspeaker cables from Crayon Audio GmbH or an authorized dealer close to you.